Amendments to the Claims

1. (Currently Amended) A method of loss detection to determine containment losses due to seepage and leakage ~~from at least one pool~~, said method ~~including the steps of~~ comprising:

maintaining a constant level in ~~said~~ at least one pool of fluid flowing between two flow regulators in an open channel,

monitoring the nett flow into said at least one pool to maintain said constant level,

determining ~~the~~ evaporation losses, ~~losses~~ and

calculating the containment losses by subtracting the evaporation losses from the nett flow into said at least one pool.

2. (Currently Amended) A method of loss detection to determine containment losses due to seepage and leakage ~~from at least one pool~~, said method ~~including the steps of~~ comprising:

measuring the change in volume of ~~said~~ at least one pool of fluid flowing between flow regulators in an open channel,

determining the evaporation losses, ~~losses~~ and

calculating the containment losses by subtracting the evaporation losses from the change in volume of said at least one pool.

3. (Currently Amended) The method of claim 1, ~~wherein said at least one pool includes~~ further comprising

~~at least first and second flow regulators to allow flow of liquid into and out of said at least one pool respectively,~~

using first and second flow sensors ~~co-operating with respective flow regulators~~ to measure the flow in and out of the pool, and

using [[a]] computational means communicating with said flow regulators and said flow sensors to control operation of said flow regulators[[,]] and to determine ~~said computational means determining~~ said containment losses by calculating the measured flow into said at least

one pool through a first of said ~~at least first~~ flow regulators and subtracting the measured flow out of said at least one pool through a second of said flow ~~at least second~~ regulators.

4. (Previously Presented) The method of claim 1, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA$,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p';

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

5. (Currently Amended) The method of claim 3, ~~wherein said at least one pool includes~~ further comprising subtracting measured flow through at least one liquid metered delivery means which communicates with said computational means ~~and the measured flow therefrom is also subtracted~~ from the nett flow into said at least one pool ~~through said at least first flow regulator~~.

6. (Currently Amended) The method of claim 3, wherein said computational means determines theft loss by treating evaporation, seepage and leakage as constants, wherein said containment losses comprise ~~are divided into~~ losses from theft, evaporation, seepage and leakage ~~where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means~~.

7. (Currently Amended) A loss detection system to determine and monitor containment losses in an ~~for~~ open channel network[[s]], said system ~~including~~ comprising:

~~at least~~ first and second flow regulators to allow flow of liquid into and out of at least one pool of fluid flowing through said open channel network ~~respectively~~,

first and second flow sensors co-operating with said ~~respective~~ flow ~~regulators~~ regulators, and

[[a]] computational means communicating with said flow regulators and said flow sensors to control operation of said flow regulators[[,]] and ~~said computational means determining~~ to determine said containment losses by calculating the measured flow into said at least one pool through a first of said ~~at least first~~ flow regulators and subtracting the measured flow out of said at least one pool through a second of said flow ~~at least second~~ regulators.

8. (Currently Amended) The loss detection system of claim 7, further comprising ~~wherein said at least one pool includes~~ at least one liquid metered delivery means which communicates with said computational means, said computational means subtracting ~~and~~ the measured flow through said at least one liquid metered delivery means ~~therefrom is also subtracted~~ from the measured flow into said at least one pool ~~through said at least first flow regulator~~.

9. (Currently Amended) The loss detection system of claim 7, wherein said computational means determines theft loss by treating evaporation, seepage and leakage as constants, wherein said containment losses comprise ~~are divided into~~ losses from theft, evaporation, seepage and leakage ~~where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means~~.

10. (Previously Amended) The loss detection system of claim 9, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA$,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p';

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

11. (Currently Amended) A method of loss detection to determine and monitor containment losses ~~for~~ in an open channel network[[s]], said open channel network comprising

~~including at least~~ first and second flow regulators to allow flow of liquid into and out of at least one pool <u>of fluid flowing through said open channel network</u> ~~respectively~~, first and second flow sensors co-operating with respective flow ~~regulators~~ <u>regulators,</u> and [[a]] computational means communicating with said flow regulators and said flow sensors to control operation of said flow regulators, said method ~~including the step of~~ <u>comprising:</u>

determining, using said computational means, said containment losses by calculating the measured flow into said at least one pool through said ~~at least~~ first flow regulator and subtracting the measured flow out of said at least one pool through said ~~at least~~ second regulator.

12. (Currently Amended) The method of claim 11, ~~wherein said at least one pool includes~~ <u>further comprising subtracting measured flow through</u> at least one liquid metered delivery means which communicates with said computational means ~~and the measured flow therefrom is also subtracted~~ from the measured flow into said at least one pool through said ~~at least~~ first flow regulator.

13. (Currently Amended) The method of claim 11, wherein <u>said computational means determines theft loss by treating evaporation, seepage and leakage as constants, wherein</u> said containment losses <u>comprise</u> ~~are divided into~~ losses from theft, evaporation, seepage and leakage ~~where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means~~.

14. (Previously Presented) The method of claim 13, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA$,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period ‘p’;

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period ‘p’ (millimetres); and

SA = surface area of the pool.

15. (Previously Presented) The method of claim 2, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA$,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p';

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

16. (Previously Presented) The method of claim 3, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA$,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p';

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

17. (Currently Amended) The method of claim 5, wherein said computational means determines theft loss by treating evaporation, seepage and leakage as constants, wherein said containment losses comprise ~~are divided into~~ losses from theft, evaporation, seepage and leakage ~~where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means~~.

18. (Currently Amended) The loss detection system of claim 8, wherein said computational means determines theft loss by treating evaporation, seepage and leakage as constants, wherein said containment losses comprise ~~are divided into~~ losses from theft, evaporation, seepage and leakage ~~where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means~~.

19. (Currently Amended) The method of claim 12, wherein said computational means determines theft loss by treating evaporation, seepage and leakage as constants, wherein said containment losses comprise ~~are divided into~~ losses from theft, evaporation, seepage and leakage ~~where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means~~.